Surgery may be in your future, but a painful recovery doesn't have to be.

Your physician can help pave the way for a smooth recovery before you even get to the hospital.

The iovera° treatment can be performed prior to knee surgery to help reduce your pain after sugery.



Talk to your doctor about iovera°



To Learn More, Please Contact:



Call our team today at 402 443-4191.

<sup>1</sup>Radnovich, R. et al. "Cryoneurolysis to treat the pain and symptoms of knee osteoarthritis: a multicenter, randomized, double-blind, sham-controlled trial." Osteoarthritis and Cartilage (2017) p1-10.

<sup>2</sup>Dasa, V. et al. "Percutaneous freezing of sensory nerves prior to total knee arthroplasty." *The Knee (2016) p.523-528.* 

<sup>3</sup>Evans et al. "Cryoanalgesia: the response to alterations in freeze cycle and temperature." *British Journal of Anesthesiology* (1981), 53 (11): 1121-1127.

The Myoscience iovera° system is used to destroy tissue during surgical procedures by applying freezing cold. It can also be used to produce lesions in peripheral nervous tissue by the application of cold to the selected site for the blocking of pain. It is also indicated for the relief of pain and symptoms associated with osteoarthritis of the knee for up to 90 days. The iovera° system is not indicated for treatment of central nervous system tissue.

# myoscience

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iovera<sup>o</sup> stopping pain... cold



The iovera° treatment uses the body's natural response to cold to block the signaling portion of a peripheral nerve, temporarily reducing pain during the critical weeks¹ following surgery.

- Provides long-lasting<sup>1</sup>, immediate pain relief
- Non-narcotic, non-systemic outpatient procedure



Hear from more patients at iovera.com

Immediately
after the iovera°
treatment, I
climbed off the exam
table and put
full weight on the
treated knee!

# iovera° Prior to Knee Surgery

Your physician knows pre-surgical preparation is important to your recovery.

Clinical studies were conducted comparing patients treated with iovera° to those who were not treated with iovera°. The results show that iovera° patients:



requested less narcotics and reported better function and pain scores<sup>2</sup>



experienced less stiffness, as reported 6 and 12 weeks after surgery<sup>2</sup>



decreased knee pain and improved symptoms for up to 150 days in 77% of the study population<sup>1</sup>

Let iovera° be part of your surgery preparation, so you can focus on your recovery.



# Frequently Asked Questions

#### How does it work?

The iovera° treatment blocks targeted sensory nerves from sending pain signals. A small probe (also referred to as Smart Tip) is inserted into the treatment region and a treatment cycle is performed. A precise cold zone is formed under the skin - cold enough to temporarily stop the nerve from signaling without damaging surrounding tissue. This is repeated until the nerve is blocked, providing pain relief until the nerve regenerates.

#### Does the treatment hurt?

A local anesthetic will be administered to the area before treatment. While the treatment should not be painful, it is normal to experience pressure, a sensation of cold, warmth, tingling and/or tapping during treatment. This altered sensation during treatment is an indication that the treatment is working.

### Are there any side effects?

Common side effects include local pain, tenderness, swelling, bruising and tingling or numbness. Typically, these reactions resolve with no physician intervention.

# How soon can I return to activity?

Post-treatment activity instructions are at the discretion of your physician. You may return to non-strenuous activity immediately after receiving the iovera° treatment; however, your physician may have additional instructions prior to your surgery. Consult your physician regarding appropriate levels of activity.

## How long do results last?

The treatment effect is immediate and lasts until the nerve has fully regenerated. Treatment results may vary by individual and the location of treatment. In general, nerves regenerate at a rate of approximately 1mm per day.<sup>3</sup> In a randomized, multi-center study, 77% of iovera<sup>o</sup> patients experienced a reduction in pain for up to 150 days.<sup>1</sup>

### If my pain is blocked, why do I still need surgery?

The iovera° treatment effect is temporary. It does not change the underlying condition for which your physician has recommended surgery. However, iovera° treatment prior to surgery can help improve pain scores, function and overall symptoms. 1.2.3